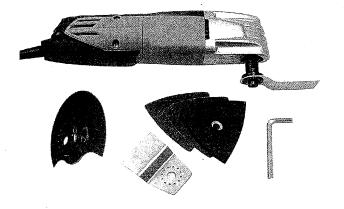
# PROFESSIONAL CHICAGO E ELECTRIC® POWER TOOLS

# VARIABLE SPEED MULTI-FUNCTION TOOL

**Model 67537** 

#### SET UP AND OPERATING INSTRUCTIONS



Visit our website at: http://www.harborfreight.com



Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

#### SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

#### IMPORTANT SAFETY **INFORMATION**

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

A DANGER a hazardous **DANGER** indicates

situation which, if not avoided, will result in death or serious injury.

### AWARNING

WARNING indicates a

hazardous situation which, if not avoided, could result in death or serious injury.

#### ACAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to personal injury.

#### CAUTION

**CAUTION**, without the safety alert

symbol, is used to address practices not related to personal injury.

#### **General Safety Warnings**



**WARNING Read all safety** warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your lineoperated (corded) power tool.

#### 1. Work area safety

- a Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids. gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

#### Electrical safety

a Power tool Plugs must match the outlet. Never modify the Plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

- b. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the Power Cord. Never use the Cord for carrying, pulling or unplugging the power tool. Keep Cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. If operating a power tool in a damp location is unavoidable, use a **Ground Fault Circuit Interrupter** (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

#### Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs. alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment. Always wear ANSI-approved safety goggles. Safety equipment such as NIOSH-approved dust mask/ respirator, NIOSH-approved hear-

- ing protection, and heavy duty wo gloves will reduce personal injuric
- c. Prevent unintentional starting. Ensure the Power Switch is in off-position before connecting the power source or picking up carrying the tool. Carrying pow tools with your finger on the Pow Switch invites accidents.
- d. Remove any adjusting key or wrench before turning the pow tool on. A wrench or a key left a tached to an oscillating part of the power tool may result in personal injury.
- e Do not overreach. Keep prope footing and balance at all times This enables better control of the power tool in unexpected situatio
- f. Dress properly. Do not wear lo clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose cloth iewelry or long hair can be caugh moving parts.

#### 4. Power tool use and care

- a. Do not force the power tool. U the correct power tool for your plication. The correct power toc do the job better and safer at the for which it was designed.
- b. Do not use the power tool if the Power Switch does not turn it a and off. Any power tool that can be controlled with the Switch is d gerous and must be repaired.
- c. Disconnect the Power Cord fro the power source before makir any adjustments, changing acc sories, or storing the power to Such preventive safety measures

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For technical questions, please call 1-800-444-3353.

- reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting accessories sharp and clean. Properly maintained cutting accessories with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool and its accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation
- 5 Service
  - a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

#### **Specific Safety Warnings**

- Maintain labels and nameplates on the power tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- CAUTION: Avoid accidental injury. Keep hands and fingers safely away from the oscillating Scraper, Blades, Sanding Pad and Sanding Papers when operating the Tool.
- Avoid unintentional starting. Prepare to begin work before turning on the power tool.
- Do not lay the power tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- Do not leave the power tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
- This product is not a toy. Keep it out of reach of children.
- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
  - Avoid operating alone.
  - Do not use with power switch locked on
  - Properly maintain and inspect to avoid electrical shock.

- Any power cord must be properly grounded. A Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
- 9. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
  - · Lead from lead-based paints
  - Crystalline silica from bricks and cement or other masonry products
  - Arsenic and chromium from chemically treated lumber
    Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

(California Health & Safety Code § 25249.5, et seq.)

Handling the Power Cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)

10. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this

product, but must be supplied by operator.

#### **Vibration Safety**

This power tool vibrates during a Repeated or long-term exposure vibration may cause temporary c permanent physical injury, partic to the hands, arms and shoulder reduce the risk of vibration-relate injury:

- Anyone using vibrating power to regularly or for an extended perio should first be examined by a do and then have regular medical cl ups to ensure medical problems not being caused or worsened fr use. Pregnant women or people who have impaired blood circula: to the hand, past hand injuries, n vous system disorders, diabetes, Raynaud's Disease should not u this tool. If you feel any medical physical symptoms related to vib tion (such as tingling, numbness, white or blue fingers), seek medi advice as soon as possible.
- Do not smoke during use. Nicotine reduces the blood supply to hands and fingers, increasing the of vibration-related injury.
- Wear suitable gloves to reduce the vibration effects on the user
- Use power tools with the lowest value bration when there is a choice be tween different processes.
- Include vibration-free periods eac day of work.

- Grip the power tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- To reduce vibration, maintain the power tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



## SAVE THESE INSTRUCTIONS.

#### GROUNDING

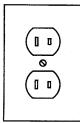
AND DEATH FROM

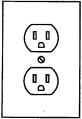
#### **AWARNING**

TO PREVENT
ELECTRIC SHOCK

**INCORRECT GROUNDING** WIRE CONNECTION: Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the Power Cord Plug provided with the tool. Never remove the grounding prong from the Plug. Do not use the tool if the Power Cord or Plug is damaged. If damaged, have it repaired by a service facility before use. If the Plug will not fit the outlet, have a proper outlet installed by a qualified

### Double Insulated Tools: Tools with Two Prong Plugs





**Outlets for 2-Prong Plug** 

 Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code

#### (See Outlets for 2-Prong Plug.)

Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration.

(See Outlets for 2-Prong Plug.)

#### **Extension Cords**

- Grounded tools require a three wire extension cord. Double Insulated tools can use either a two or three wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.

(See Table A, next page.)

- The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
- 4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Table A.)
- If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
- If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
- Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)						
NAMEPLATE	EXTENSION CORD LENGTH					
AMPERES (at full load)	25'	50'	75'	100'	150'	
0 – 2.0	18	18	18	18	16	
2.1 – 3.4	18	18	18	16	14	
3.5 – 5.0	18	18	16	14	12	
5.1 7.0	18	16	14	12	12	
7.1 – 12.0	18	14	12	10	-	
* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.						

#### Symbology

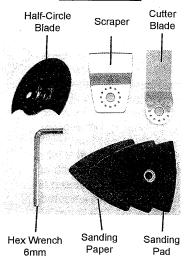
	Double insulated
	Canadian Standards Associa
(j.	Underwriters Laboratories, Ir
V~	Volts Alternating Current
Α	Amperes
0 xxxx/min.	No Load Revolutions per Min (RPM)

electrician.

#### **SPECIFICATIONS**

Electrical Input	120 V~ / 60 Hz / 2 A
Motor No Load Speed	10,000 - 20,000 OPM
Decibel Level	93-95 dB @ 1m at speed #6 75 dB @ 1m at speed #1
Sanding Pad Dimensions	3" Triangle
Accessories	Sanding Pad (Qty. 1) Sanding Paper (Qty. 2) Cutter Blade (Qty. 1) Scraper (Qty. 1) Half-Circle Blade (Qty. 1) Hex Wrench (Qty. 1) Carbon Brushes (Qty. 2) Molded Storage Case (Qty. 1)

#### Accessories



#### Unpacking

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353 as soon as possible.

#### Components

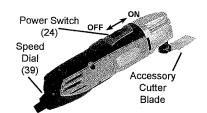


Figure 2

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

#### **OPERATING INSTRUCTIONS**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

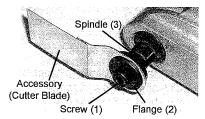
#### **Tool Set Up**

### **AWARNING**

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before adjusting tool or installing accessories.



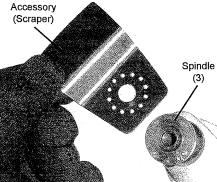


Figure 3

To install an Accessory:

- a. Unthread the Screw (1), turning it counter clockwise, and remove the Screw and the Flange (2) from the Spindle (3).
- b. Line up the holes on the Accessory with the four tabs on the Spindle.

Note: When attaching the Cutter Blade or the Scraper, orient the accessory as shown above so the Screw (1) will be out of the way when working.

 Place the cup side of the Flange over the accessory and tighten the Screw into the spindle using the provided hex key. Torque firmly.

Note: For sanding, first attach the Sanding Pad to the tool, then align a Sheet of Sand paper over the pad and press into place.

Note: Accessories may be mounted at angles up to 90° left or right. The cessory should not turn when mo ed on the Spindle (3). If it can tur reposition it so that four of the hol on the Accessory line up with the tabs on the Spindle, then tighten Screw (1) securely.

Cutter Blade Accessory

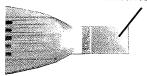


Figure 4

Note: The long Cutter Blade should or be used in the straight ahead pos as shown above.

#### Work Piece and Work Area Set

- Designate a work area that is clea and well-lit. The work area must i allow access by children or pets to prevent distraction and injury.
- 2. Route the Power Cord (37) along a safe path to reach the work area without creating a tripping hazard or exposing the Power Cord to posible damage. The Power Cord mareach the work area with enough extra length to allow free moveme while working.
- Secure loose work pieces using a vise or clamps (not included) to pr vent movement while working.

#### **General Operating Instruction**

 Wear NIOSH-approved hearing protection and ANSI-approved saf goggles when using this tool.

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For technical questions, please call 1-800-444-3353.

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- Before each use, check that the accessory is securely seated on the tool with four of the holes on the accessory in place over the four pins on the Spindle (3), and the Screw (1) firmly tightened down.
- Slide the Power Switch (24) back to its off position. Then plug the Power Cord (37) into the nearest 120 volt. grounded electrical outlet.
- To turn on the tool, slide the Power Switch (24) forward.



Figure 5

- Adjust the speed of the tool using the Speed Dial (39). There are six speed divisions from 1 (slowest) to 6 (fastest).
- Do not allow contact between the Accessory and workpiece until the tool is running at the intended speed.
- Avoid contact with foreign objects such as metal screws and nails when sanding, scraping, or cutting.
- Do not apply excessive pressure on the tool. Allow the tool to do the work.

- When finished, turn off the tool and allow it to completely stop before setting it down. Then unplug the tool from its electrical outlet.
- 10. To replace the Sanding Paper, simply pull it off the pad and replace with a new sheet of Sanding Paper.
- Prior to storing the tool, remove the Accessory and wipe it clean. Store the tool in a clean, dry, safe location out of reach of children and other unauthorized persons.

#### **MAINTENANCE AND SERVICING**



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch (24) of the Tool to its "OFF" position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

BEFORE EACH USE, inspect the general condition of the Tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.

#### As needed:

- a. Replace the Sanding Paper when it becomes worn or contains excessive debris build-up.
- b. Have the Scraper and Blades sharpened when they become dull.
- c. Have a qualified technician inspect the tool when it malfunctions. The

SKU 67537

For technical questions, please call 1-800-444-3353.

Carbon Brushes (a spare set is

cluded) may need to be replace

AFTER USE, clean external sur

of this Tool is damaged, it must I

replaced only by a qualified serv

of the tool with clean cloth.

**AWARNING!** If the Power Cord (37)

technician.

#### PLEASE READ THE FOLLOWING CAREFULLY

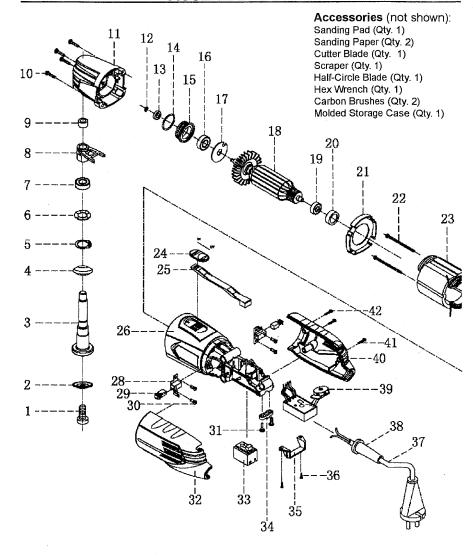
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

#### **PARTS LIST**

Part	Description	Qty
1	Socket Head Screw M8 x 1.25 x 12	1
2	Flange	1
3	Spindle	1
4	Rubber Casing	1
5	Circlip	1
6	Spring Washer	1
7	Bearing 6000	1
8	Block	1
9	Bushing	1
10	Screw ST4 x 25	4
11	Housing Head	1
12	Circlip	1
13	Bearing 625	1
14	Washer	1
15	Cover	1
16	Bearing 608	1
17	Washer	1
18	Armature	1
19	Bearing 607	1
20	Bushing	1
21	Guide	1

Part	Description	Qty
22	Screw ST4.0 x 55	2
23	Stator	1
24	Power Switch	1
25	Link	1
26	Plastic Housing	1
28	Brush Holder	2
29	Carbon Brush	2
30	Rivet	4
31	Screw ST4.0 x 12	2
32	Rear Housing (left)	1
33	Switch	1
34	Brace	1
35	Clip	1
36	Screw ST3.0 x 8	2
37	Power Cord	1
38	Rubber Sleeve	1
39	Speed Dial	1
40	Rear Housing (right)	1
41	Screw ST4.0 x 25	1
42	Screw ST4.0 x 32	2

#### **ASSEMBLY DIAGRAM**



Record Product's Serial Number Here:\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not avable individually as replacement parts.

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For technical questions, please call 1-800-444-3353.

#### **LIMITED 90 DAY WARRANTY**

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

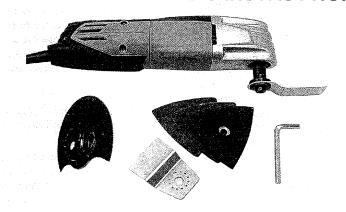
3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353



# VARIABLE SPEED MULTI-FUNCTION TOOL

**Model** 67537

#### **SET UP AND OPERATING INSTRUCTIONS**



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Read this material before using this production Failure to do so can result in serious injury SAVE THIS MANUAL.

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